

## Taxonomic paper

# Checklist of British and Irish Hymenoptera - Evanioidea

Gavin R. Broad<sup>†</sup>, Laurence Livermore<sup>†</sup>

† The Natural History Museum, London, United Kingdom

Corresponding author: Gavin R. Broad (g.broad@nhm.ac.uk)

Academic editor: Jose Fernandez-Triana

Received: 20 May 2014 | Accepted: 15 Jun 2014 | Published: 17 Jun 2014

Citation: Broad G, Livermore L (2014) Checklist of British and Irish Hymenoptera - Evanioidea. Biodiversity Data

Journal 2: e1116. doi: 10.3897/BDJ.2.e1116

#### Introduction

Abbreviations, rationale for species inclusion and additional information are given in the introductory article for the series. This article is the first in a series of 13 checklist sections covering the Hymenoptera of the British Isles. For each genus and species the original combination and a list of synonyms is provided under the heading 'nomenclature'.

A corresponding up-to-date checklist for Evanioidea is maintained on the <u>Hymenoptera of the British Isles site</u>.

Distribution data for the Evanioidea are taken from Crosskey (1951), with additional references given under notes for each taxon. This is a small superfamily of three extant families, but particularly poorly represented in northern Europe. The Evaniidae (sometimes referred to as 'ensign wasps') are, where known, parasitoids/predators of cockroach oothecae (Crosskey 1951; Brown 1973) and are morphologically very distinct from the remaining families. Whilst rather similar in appearance, the Aulacidae and Gasteruptiidae (Fig. 1) differ markedly in biology, with the single British aulacid, *Aulacus striatus* (Jurine), being a koinobiont endoparasitoid of Xiphydriidae larvae (see E.R. Skinner & W.G. Thompson's 1960 film, 'The Alder Woodwasp and its Insect Enemies', distributed by World Educational Films: <a href="http://worldeducationalfilms.com/the-alder-woodwasp-and-its-insect-enemies/">http://worldeducationalfilms.com/the-alder-woodwasp-and-its-insect-enemies/</a>) whilst *Gasteruption* species are essentially predators and cleptoparasites of solitary bee larvae (Malyshev 1964).



Figure 1.

Male *Gasteruption jaculator* (Linnaeus) (Wilmslow, Cheshire) (courtesy of A.M. Broome).

# Evanioidea

# Family Aulacidae Shuckard, 1841

Notes: Taxonomy follows Smith (2001).

# Genus Aulacus Jurine, 1807

#### Nomenclature:

DISPHAERON Dahlbom, 1837
AULACINUS Westwood, 1868
PAMMEGISCHIA Provancher, 1882
DISAULACINUS Kieffer, 1910
MICRAULACINUS Kieffer, 1910
NEURAULACINUS Kieffer, 1910
PARAFOENUS Kieffer, 1910
PYCNAULACUS Cushman, 1929

## Aulacus striatus Jurine, 1807

#### Nomenclature:

arcticus Dahlbom, 1837 exaratus Ratzeburg, 1852 **Distribution:** England.

## Family Evaniidae Latreille, 1802

Notes: Taxonomy follows Deans (2005).

Genus Evania Fabricius, 1775

# Evania appendigaster (Linnaeus, 1758)

#### Nomenclature:

Ichneumon appendigaster Linnaeus, 1758
niger (de Geer, 1773, Ichneumon)
laevigata Olivier, 1792
unicolor Say, 1824
desjardinsi Blanchard, 1840
affinis Le Guillou, 1841
cubae Guérin-Méneville, 1844
peringueyi Cameron, 1906

Notes: # Presumably an introduction to Britain as it parasitises the oothecae of non-native synanthropic cockroaches (Blattidae). Crosskey (1951) could find no locality data for British specimens and there are no relevant specimens in NHM.

## Genus Brachygaster Leach, 1830

## **Brachygaster minutus (Olivier, 1792)**

#### Nomenclature:

Evania minuta Olivier, 1792
fulvipes (Curtis, 1829, Evania)
rufipes Brullé, 1846 preocc.
brullei (Westwood, 1851, Evania)
schlettereri Kieffer, 1912

**Distribution:** England.

### Family Gasteruptiidae Ashmead, 1890

Notes: Synonymic data mostly from Fauna Europaea.

# Genus Gasteruption Latreille, 1796

#### Nomenclature:

FOENUS Fabricius, 1798
RHYDINOFOENUS Bradley, 1909
DOLICHOFOENUS Kieffer, 1910
TRICHOFOENUS Kieffer, 1910
PLUTOFOENUS Kieffer, 1911

# Gasteruption assectator (Linnaeus, 1758)

#### Nomenclature:

Ichneumon assectator Linnaeus, 1758 affectator misspelling annularis (Geoffrey 1785, Ichneumon) incertus (Cresson 1864, Foenus) montanus (Cresson 1864, Foenus) arca (Couper 1870, Foenus) borealis (Thomson 1883, Foenus) fumipennis (Thomson 1883, Foenus) nigritarsis (Thomson 1883, Foenus) nitidulum Schletterer, 1885 brevicauda Kieffer 1904 micrura Kieffer 1904 nevadense Kieffer 1904 nigropectus Kieffer, 1904 bakeri Kieffer 1910 canadensis (Kieffer 1910, Trichofoenus) abeillei Kieffer 1912 aberrans Strand, 1912 breviterebrae (Watanabe 1934, Trichofoenus) utahensis Townes 1950 margotae Madl 1987

**Distribution:** England, Wales, Ireland.

# Gasteruption jaculator (Linnaeus, 1758)

#### Nomenclature:

Ichneumon jaculator Linnaeus, 1758
granulithorax (Tournier, 1877, Foenus)
obliteratus (Abeille de Perrin, 1879, Foenus)
rugidorsus (Costa, 1884, Foenus)
thomsoni Schletterer, 1885

Distribution: England.

# Gasteruption laticeps (Tournier, 1877)

#### Nomenclature:

Foenus laticeps Tournier, 1877 foveolatum Schletterer, 1889 foveolum Szépligeti, 1903

# Gasteruption minutum (Tournier, 1877)

#### Nomenclature:

Foenus minutum Tournier, 1877

Iongigena (Thomson, 1883, Foenus)

Distribution: England, Wales (Alexander 1983).

## Gasteruption pedemontanum (Tournier, 1877)

#### Nomenclature:

Foenus pedemontanum Tournier, 1877

pedmontanum misspelling

terrestre (Tournier, 1877, Foenus)

trifossulatum Kieffer, 1904

**Distribution:** England.

# References

- Alexander KNA (1983) Gasteruption minutum (Tournier) (Hym., Gasteruptiidae) on Anglesey. Entomologist's Monthly Magazine 119: 150.
- Brown VK (1973) The biology and development of *Brachygaster minutus* Olivier (Hymenoptera: Evaniidae), a parasite of the oothecae of *Ectobius* spp. (Dictyoptera: Blattidae). Journal of Natural History 7 (6): 665-674. DOI: 10.1080/00222937300770561
- Crosskey RW (1951) The morphology, taxonomy, and biology of the British Evanioidea (Hymenoptera). Transactions of the Royal Entomological Society of London 102: 247-301. DOI: 10.1111/j.1365-2311.1951.tb00749.x
- Deans A (2005) Annotated catalog of the world's ensign wasp species (Hymenoptera: Evaniidae). Contributions of the American Entomological Institute 34 (1): 1-164.
- Malyshev SI (1964) A comparative study of the life and development of primitive gasteruptiids (Hymenoptera, Gasteruptiidae). Entomological Review 43: 267-271.
- Smith DR (2001) World catalog of the family Aulacidae (Hymenoptera). Contributions of the American Entomological Institute 4: 263-319.